

Abstract of the Disclosure

Glass medical devices such as medical containers are manufactured and annealed by heating in an oven which produces a clean device having a low bio-burden. Plastic medical devices and medical containers are formed by plastic molding devices which produce a clean device. The clean devices are immediately transferred to a controlled environment to maintain a clean work area. The work area can be a clean room or localized area to avoid the need to maintain cleanliness levels in an entire room. A localized area uses a housing assembly having a HEPA filter coupled to an air inlet to filter the air entering the housing. An air blower is coupled to the air inlet to feed filtered air into the housing assembly and to maintain a positive air pressure in the housing assembly to prevent unfiltered outside air from entering. Syringe tip closures can be introduced into the housing assembly, where syringe barrels and tip closures are cleaned with filtered ionized air and the tip closures are coupled to the barrels. A thin coating of lubricant is applied to the inner surfaces of the syringe barrels. The syringe barrels or medical container can be filled with a substance and a closure member is attached. While still in the housing assembly the syringe barrels can be formed into an array and placed in a clean outer container. The outer container is then closed and sealed. The outer container and syringe barrels can be sterilized with heat, radiation or by exposure to a sterilizing gas. The syringe barrels may be prefillable glass or plastic syringe barrels.